



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

Aug. 12, 2015

Sunnyvale, CA

**Re: Vapor Intrusion Indoor Air Sampling Results for Residential Building #051 (RES#051)  
Sunnyvale, California  
Philips, Advanced Micro Devices 901-902, TRW Microwave Superfund Sites ("Triple Site")**

Dear

Thank you for your cooperation and participation in the U.S. Environmental Protection Agency's (EPA) vapor intrusion indoor air sampling investigations in Sunnyvale, California. As a follow-up to our April 3, 2015, telephone call, this letter confirms in writing the results of EPA's indoor air sampling for trichloroethene (TCE), conducted at your home on February 11, 2015.

***Your TCE Indoor Air Results:*** EPA considers TCE levels below 2 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to be health protective. Low levels of TCE were detected in the air inside your home and in the crawlspace beneath your building (up to  $0.20 \mu\text{g}/\text{m}^3$  in indoor air and up to  $0.32 \mu\text{g}/\text{m}^3$  in crawlspace air). **These concentrations meet EPA's short-term health protective screening level for TCE ( $2 \mu\text{g}/\text{m}^3$ ) and EPA's long-term health protective screening level ( $0.48 \mu\text{g}/\text{m}^3$ ). However, because EPA has learned more about how these levels can vary over time, EPA would like to test your home again next winter to confirm these results.**

***Background on EPA Investigation:*** As you may know, EPA has been investigating the potential for vapor intrusion—a process where vapors from groundwater contamination may migrate into the indoor air in buildings—in the Duane/San Miguel Avenue neighborhood. Please be aware that your drinking water is not affected by contaminants in groundwater. Your water for drinking, bathing, and watering gardens comes from the Hetch Hetchy Reservoir in the Sierra Nevada.

***Health Protection Goals:*** EPA's goal for Superfund site-related chemicals is to keep exposures as low as reasonably possible. EPA considers the safe range of TCE concentrations for residences to be below  $2 \mu\text{g}/\text{m}^3$  (the short-term screening level). When an indoor air sample is collected and shows a concentration above the long-term screening level ( $0.48 \mu\text{g}/\text{m}^3$ ) but below  $2 \mu\text{g}/\text{m}^3$ , EPA uses this information to decide whether additional sampling is necessary to confirm that levels continue to remain protective over time. More information about TCE can be found at this website: [http://www.epa.gov/teach/chem\\_summ/TCE\\_summary.pdf](http://www.epa.gov/teach/chem_summ/TCE_summary.pdf)

***More About Your Results:*** Low levels of TCE were detected in the air in your home during the February 2015 sampling event. The sample results meet EPA's short-term health protective screening level for TCE ( $2 \mu\text{g}/\text{m}^3$ ) and EPA's long-term health protective screening level ( $0.48 \mu\text{g}/\text{m}^3$ ). The table below shows the sampling results for your home.

One other compound that is not associated with the Triple Site was detected (perchloroethene or PCE) at low concentrations (up to  $0.45 \mu\text{g}/\text{m}^3$  in the crawlspace) that are below the long-term health protective screening level of  $0.48 \mu\text{g}/\text{m}^3$ .

PCE and TCE belong to a chemical category called VOCs (volatile organic compounds), which are contained in products that may be commonly found around the home (such as silicone lubricants, spot removers, adhesives, wood cleaners, and dry-cleaned clothing).

Additionally, because PCE is not found in the groundwater beneath your neighborhood, and because the PCE concentration in one of your crawlspace samples is above the maximum outdoor concentration of PCE measured in your neighborhood, it is possible that the low levels of PCE detected in your crawlspace are related to an indoor source of the chemical.

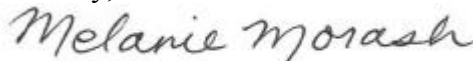
Identifying and removing the product in your home that contains the PCE (if one exists) would likely result in a decrease in the PCE levels measured, and we would be happy to answer any questions you might have about indoor sources of PCE or other VOCs.

Sample Location	TCE Concentration February 2015	PCE Concentration February 2015
Indoor Air Sample (24-hr sample)	0.20 µg/m <sup>3</sup>	0.19 µg/m <sup>3</sup>
Indoor Air Sample (6-day sample)	0.089 µg/m <sup>3</sup>	0.082 µg/m <sup>3</sup>
Crawlspace Air Sample (24-hr sample)	0.25 µg/m <sup>3</sup>	0.16 µg/m <sup>3</sup>
Crawlspace Air Sample (6-day sample)	0.32 µg/m <sup>3</sup>	0.45 µg/m <sup>3</sup>
Outdoor Air Sample—Maximum (a neighbor's backyard)	0.29 µg/m <sup>3</sup>	0.20 µg/m <sup>3</sup>
<b>EPA Screening Levels</b>		
Short-term Screening Level	2.0 µg/m <sup>3</sup>	36.5 µg/m <sup>3</sup>
Long-term Screening Level	0.48 µg/m <sup>3</sup>	0.48 µg/m <sup>3</sup>

***TCE Vapor Intrusion Findings:*** EPA considers these concentrations protective of your health and they meet EPA's requirements for safeguarding against potential health effects due to TCE vapor intrusion. **However, because EPA has learned more about how these levels can vary over time, EPA would like to test your home again next winter to confirm these results.**

***Next Steps:*** We will contact you again in December to arrange the next rounds of testing. If you have any questions, please contact me at (415) 972-3050 or by email to [morash.melanie@epa.gov](mailto:morash.melanie@epa.gov). You may also contact EPA's Community Involvement Coordinator, Alejandro Diaz, who is fluent in Spanish, at (415) 972-3242 or by email to [diaz.alejandro@epa.gov](mailto:diaz.alejandro@epa.gov). EPA has a website for this project, which is regularly updated with the most current information available: [www.epa.gov/region9/triplesite](http://www.epa.gov/region9/triplesite). Thank you again for your cooperation and participation in this air sampling investigation.

Sincerely,



Melanie Morash  
EPA Project Manager